

Please amend the above-identified patent application, without prejudice, as follows:

IN THE SPECIFICATION:

IN THE CLAIMS:

— Amend claims 6 and 12 as follows:

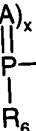
6. (amended) A method for the preparation of mono- or bisacylphosphines, mono- or bisacylphosphine oxides or mono- or bisacylphosphine sulfides comprising reacting a compound of formula I according to claim 1.

— 12. (amended) A photocurable composition comprising

(a) at least one ethylenically unsaturated photopolymerizable compound and

(b) at least one compound of the formula II according to claim 2 or at least one compound

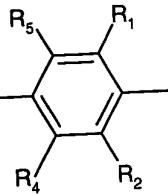
according to formula III Ar— $\overset{\text{O}}{\underset{\parallel}{\text{C}}}$ — $\overset{(\text{A})_x}{\underset{\parallel}{\text{P}}}$ —Z₁ (III), in which



A is O or S;

x is 0 or 1;

Ar is a group



; or Ar is cyclopentyl, cyclohexyl, naphthyl, anthracyl,

biphenyl or an O-, S- or N-containing 5- or 6-membered heterocyclic ring, where the radicals cyclopentyl, cyclohexyl, naphthyl, anthracyl, biphenyl and 5- or 6-membered heterocyclic ring are unsubstituted or substituted by halogen, C₁-C₄alkyl and/or C₁-C₄alkoxy; R₁ and R₂ independently of one another are C₁-C₂₀alkyl, OR₁₁, CF₃ or halogen; R₃, R₄ and R₅ independently of one another are hydrogen, C₁-C₂₀alkyl, OR₁₁ or halogen; or in each case two of the radicals R₁, R₂, R₃, R₄ and R₅ together form C₁-C₂₀alkylene which can be interrupted by O, S or -NR₁₄;

R_6 is C_1 - C_{24} alkyl, unsubstituted or substituted by C_5 - C_{24} cycloalkenyl, phenyl, CN, $C(O)R_{11}$, $C(O)OR_{11}$, $C(O)N(R_{14})_2$, $OC(O)R_{11}$, $OC(O)OR_{11}$, $N(R_{14})C(O)N(R_{14})$, $OC(O)NR_{14}$, $N(R_{14})C(O)OR_{11}$,

cycloalkyl, halogen, OR_{11} , SR_{11} , $N(R_{12})(R_{13})$ or $\begin{array}{c} O \\ \backslash \\ -C-H-C\backslash \\ / \\ CH_2 \end{array}$;

C_2 - C_{24} alkyl which is interrupted once or more than once by nonconsecutive O, S or NR_{14} and which is unsubstituted or substituted by phenyl, OR_{11} , SR_{11} , $N(R_{12})(R_{13})$, CN, $C(O)R_{11}$, $C(O)OR_{11}$,

$C(O)N(R_{14})_2$ and/or $\begin{array}{c} O \\ \backslash \\ -C-H-C\backslash \\ / \\ CH_2 \end{array}$;

C_2 - C_{24} alkenyl which is uninterrupted or interrupted once or more than once by nonconsecutive O, S or NR_{14} and which is unsubstituted or substituted by OR_{11} , SR_{11} or $N(R_{12})(R_{13})$;

C_5 - C_{24} cycloalkenyl which is uninterrupted or interrupted once or more than once by nonconsecutive O, S or NR_{14} and which is unsubstituted or substituted by OR_{11} , SR_{11} or $N(R_{12})(R_{13})$;

C_7 - C_{24} arylalkyl which is unsubstituted or substituted on the aryl group by C_1 - C_{12} alkyl, C_1 - C_{12} alkoxy or halogen;

C_4 - C_{24} cycloalkyl which is uninterrupted or interrupted once or more than once by O, S and/or NR_{14} and which is unsubstituted or substituted by OR_{11} , SR_{11} or $N(R_{12})(R_{13})$; or C_8 - C_{24} arylcycloalkyl or C_8 - C_{24} arylalkenyl;

R_{11} is H, C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, C_3 - C_8 cycloalkyl, phenyl, benzyl or C_2 - C_{20} alkyl which is interrupted once or more than once by nonconsecutive O atoms and which is unsubstituted or substituted by OH and/or SH;

R_{12} and R_{13} independently of one another are hydrogen, C_1 - C_{20} alkyl, C_3 - C_8 cycloalkyl, phenyl, benzyl or C_2 - C_{20} alkyl, which is interrupted once or more than once by O or S and which is unsubstituted or substituted by OH and/or SH; or R_{12} and R_{13} together are C_3 - C_5 alkylene which is uninterrupted or interrupted by O, S or NR_{14} ;

Z_1 is C_1 - C_{24} alkyl, which is unsubstituted or substituted once or more than once by OR_{15} , SR_{15} , $N(R_{16})(R_{17})$, phenyl, halogen, CN, $-N=C=A$, $\begin{array}{c} O \\ \backslash \\ -C-H-C\backslash \\ / \\ CH_2 \end{array}$,

$\begin{array}{c} A \\ || \\ -C-R_{18} \end{array}$, $\begin{array}{c} A \\ || \\ -C-OR_{18} \end{array}$

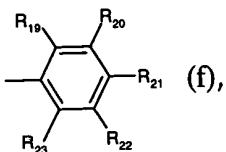
and/or $\begin{array}{c} A_1 \\ || \\ -C-N(R_{18})_2 \end{array}$ or Z_1 is C_2 - C_{24} alkyl which is interrupted once or more than once by O, S

or NR_{14} and which can be substituted by OR_{15} , SR_{15} , $N(R_{16})(R_{17})$, phenyl, halogen, $\begin{array}{c} O \\ \backslash \\ -C-H-C\backslash \\ / \\ CH_2 \end{array}$,

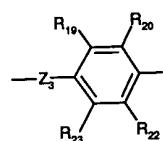
$\text{—C}=\text{A—R}_{18}$, $\text{—C}(=\text{A})\text{—OR}_{18}$ and/or $\text{—C}(=\text{A}_1)\text{—N}(\text{R}_{18})_2$; or Z_1 is $\text{C}_1\text{-}\text{C}_{24}$ alkoxy, which is substituted once

or more than once by phenyl, CN, $-\text{N}=\text{C}=\text{A}$, $\text{—C}(=\text{A}_1)\text{—CH}_2\text{—O—CH}_2$, $\text{—C}(=\text{A})\text{—R}_{18}$, $\text{—C}(=\text{A}_1)\text{—OR}_{18}$ and/or

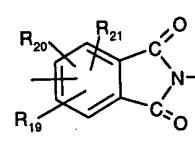
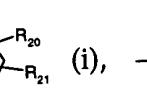
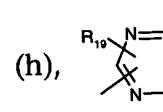
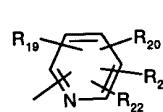
$\text{—C}(=\text{A}_1)\text{—N}(\text{R}_{18})_2$; or Z_1 is $\text{C}_1\text{-}\text{C}_{24}$ cycloalkyl or $\text{C}_3\text{-}\text{C}_{24}$ cycloalkyl substituted by $\text{C}_1\text{-}\text{C}_{20}$ alkyl, OR_{11} , CF_3 or
 Z_1 is unsubstituted $\text{C}_3\text{-}\text{C}_{24}$ cycloalkenyl or $\text{C}_2\text{-}\text{C}_{24}$ alkenyl substituted by $\text{C}_6\text{-}\text{C}_{12}$ aryl, CN, $(\text{CO})\text{OR}_{15}$ or
halogen; unsubstituted $\text{C}_2\text{-}\text{C}_{24}$ alkenyl or $\text{C}_2\text{-}\text{C}_{24}$ alkenyl substituted by $\text{C}_6\text{-}\text{C}_{12}$ aryl, CN, $(\text{CO})\text{OR}_{15}$ or



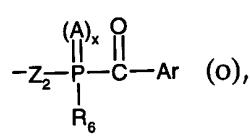
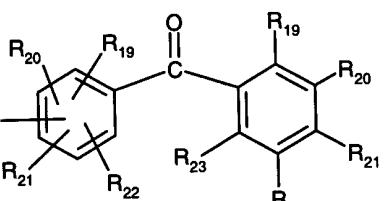
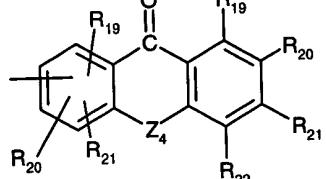
$(\text{CO})\text{N}(\text{R}_{18})_2$; or Z_1 is $\text{C}_3\text{-}\text{C}_{24}$ cycloalkenyl or is one of the radicals



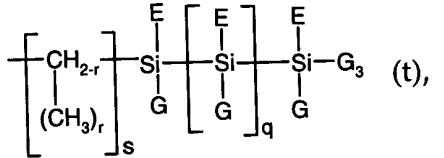
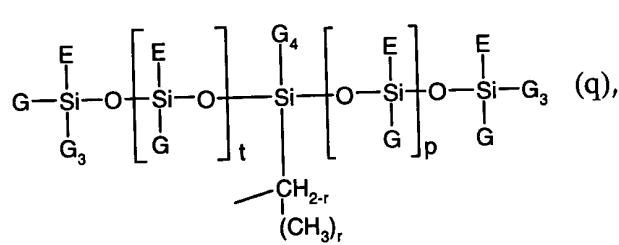
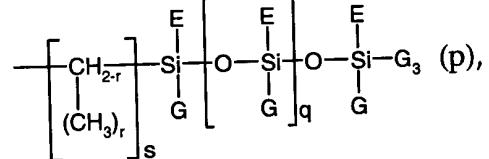
(g), (h), (i), (k),

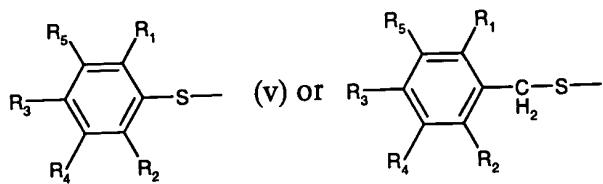


(l), (m), (n),



(o), (p),





(v) or (w); or Z_1 is $C_1\text{-}C_{24}$ alkylthio, in which the alkyl

radical is uninterrupted or interrupted once or more than once by nonconsecutive O or S, and is unsubstituted or substituted by OR_{15} , SR_{15} and/or halogen; with the proviso that Z_1 and R_6 are not identical;

A_1 is O, S or NR_{18a} ;

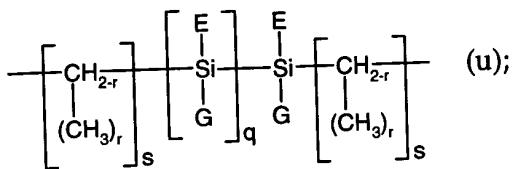
Z_2 is $C_1\text{-}C_{24}$ alkylene; $C_2\text{-}C_{24}$ alkylene interrupted once or more than once by O, S or NR_{14} ; $C_2\text{-}C_{24}$ alkenylene; $C_2\text{-}C_{24}$ alkenylene interrupted once or more than once by O, S or NR_{14} ; $C_3\text{-}C_{24}$ cycloalkylene; $C_3\text{-}C_{24}$ cycloalkylene interrupted once or more than once by O, S or NR_{14} ; $C_3\text{-}C_{24}$ cycloalkylene; $C_3\text{-}C_{24}$ cycloalkenylene interrupted once or more than once by O, S or NR_{14} ; where the radicals $C_1\text{-}C_{24}$ alkylene, $C_2\text{-}C_{24}$ alkylene, $C_2\text{-}C_{24}$ alkenylene, $C_3\text{-}C_{24}$ cycloalkylene and $C_3\text{-}C_{24}$ cycloalkenylene are unsubstituted or are substituted by OR_{11} , SR_{11} , $N(R_{12})(R_{13})$ and/or halogen;

or Z_2 is one of the radicals ,

or , where these radicals are unsubstituted or are substituted on the

aromatic by $C_1\text{-}C_{20}$ alkyl; $C_2\text{-}C_{20}$ alkyl which is interrupted once or more than once by nonconsecutive O atoms and which is unsubstituted or substituted by OH and/or SH; OR_{11} , SR_{11} , $N(R_{12})(R_{13})$, phenyl, halogen, NO_2 , CN, $(CO)\text{-}OR_{11}$, $(CO)\text{-}R_{11}$, $(CO)\text{-}N(R_{12})(R_{13})$, SO_2R_{24} , OSO_2R_{24} , CF_3 and/or CCl_3 ;

or Z_2 is a group



(u);

Z_3 is CH_2 , CH(OH) , $\text{CH(CH}_3)$ or $\text{C(CH}_3)_2$;

Z_4 is S, O, CH_2 , C=O , NR_{14} or a direct bond;

Z_5 is S, O, CH_2 , CHCH_3 , $\text{C(CH}_3)_2$, $\text{C}(\text{CF}_3)_2$, SO, SO_2 , CO;

Z_6 and Z_7 independently of one another are CH_2 , CHCH_3 or $\text{C(CH}_3)_2$;

r is 0, 1 or 2;

s is a number from 1 to 12;

q is a number from 0 to 50;

t and p are each a number from 0 to 20;

E , G , G_3 and G_4 independently of one another are unsubstituted $\text{C}_1\text{-C}_{12}$ alkyl or $\text{C}_1\text{-C}_{12}$ alkyl substituted by halogen, or are unsubstituted phenyl or phenyl substituted by one or more $\text{C}_1\text{-C}_4$ alkyl; or are $\text{C}_2\text{-C}_{12}$ alkenyl;

R_{11a} is $\text{C}_1\text{-C}_{20}$ alkyl substituted once or more than once by OR_{15} or $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-\text{CH}_2$; or is $\text{C}_2\text{-C}_{20}$ alkyl

which is interrupted once or more than once by nonconsecutive O atoms and is unsubstituted

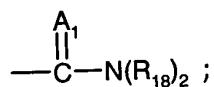
or substituted once or more than once by OR_{15} , halogen or $-\overset{\text{O}}{\underset{\text{H}}{\text{C}}}-\text{CH}_2$; or R_{11a} is $\text{C}_2\text{-C}_{20}$ alkenyl, $\text{C}_3\text{-}$

C_{12} alkynyl; or R_{11a} is $\text{C}_3\text{-C}_{12}$ cycloalkenyl which is substituted once or more than once by halogen,

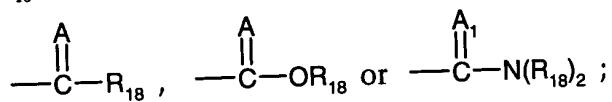
NO_2 , $\text{C}_1\text{-C}_6$ alkyl, OR_{11} or $\text{C}(\text{O})\text{OR}_{18}$; or $\text{C}_7\text{-C}_{16}$ arylalkyl or $\text{C}_8\text{-C}_{16}$ arylcycloalkyl;

R_{14} is hydrogen, phenyl, $\text{C}_1\text{-C}_{12}$ alkoxy, $\text{C}_1\text{-C}_{12}$ alkyl or $\text{C}_2\text{-C}_{12}$ alkyl which is interrupted once or more than once by O or S and which is unsubstituted or substituted by OH and/or SH;

R_{15} has one of the meanings given for R_{11} or is a radical $-\overset{\text{A}}{\underset{\text{H}}{\text{C}}}-\text{R}_{18}$, $-\overset{\text{A}}{\underset{\text{H}}{\text{C}}}-\text{OR}_{18}$ or



R_{16} and R_{17} independently of one another have one of the meanings given for R_{12} or are a radical



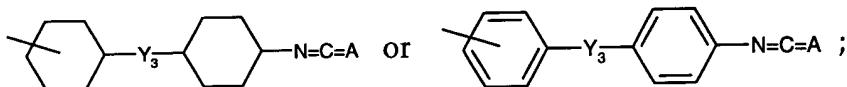
R_{18} is hydrogen, C_1 - C_{24} alkyl, C_2 - C_{12} alkenyl, C_3 - C_8 cycloalkyl, phenyl, benzyl; C_2 - C_{20} alkyl which is interrupted once or more than once by O or S and which is unsubstituted or substituted by OH; R_{18a} and R_{18b} independently of one another are hydrogen; C_1 - C_{20} alkyl, which is substituted once

or more than once by OR_{15} , halogen, styryl, methylstyryl, $-N=C=A$ or $-\overset{O}{C}(\text{H})-\text{CH}_2$; or C_2 - C_{20} alkyl,

which is interrupted once or more than once by nonconsecutive O atoms and which is unsubstituted or substituted once or more than once by OR_{15} , halogen, styryl, methylstyryl or

$-\overset{O}{C}(\text{H})-\text{CH}_2$; or R_{18a} and R_{18b} are C_2 - C_{12} alkenyl; C_5 - C_{12} cycloalkyl, which is substituted by $-N=C=A$ or -

$\text{CH}_2-N=C=A$ and is additionally unsubstituted or substituted by one or more C_1 - C_4 alkyl; or R_{18a} and R_{18b} are C_6 - C_{12} aryl, unsubstituted or substituted once or more than once by halogen, NO_2 , C_1 - C_6 alkyl, C_2 - C_4 alkenyl, OR_{11} , $-N=C=A$, $-\text{CH}_2-N=C=A$ or $C(O)OR_{18}$; or R_{18a} and R_{18b} are C_7 - C_{16} arylalkyl; or R_{18a} and R_{18b} together are C_8 - C_{16} arylalkylcycloalkyl; or R_{18a} and R_{18b} independently of one another are



Y_3 is O, S, SO_2 , CH_2 , $\text{C}(\text{CH}_3)_2$, CHCH_3 , $\text{C}(\text{CF}_3)_2$, (CO), or a direct bond;

R_{19} , R_{20} , R_{21} , R_{22} and R_{23} independently of one another are hydrogen, C_1 - C_{20} alkyl; C_2 - C_{20} alkyl, which is interrupted once or more than once by nonconsecutive O atoms and which is unsubstituted or substituted by OH and/or SH; or R_{19} , R_{20} , R_{21} , R_{22} and R_{23} are OR_{11} , SR_{11} , $N(R_{12})(R_{13})$, NO_2 , CN, SO_2R_{24} , $\text{OSO}_2\text{R}_{24}$, CF_3 , CCl_3 , halogen; or phenyl which is unsubstituted or substituted once or more than once by C_1 - C_4 alkyl or C_1 - C_4 alkoxy;

or in each case two of the radicals R_{19} , R_{20} , R_{21} , R_{22} and R_{23} together form C_1 - C_{20} alkylene which is uninterrupted or interrupted by O, S or $-NR_{14}$;

R_{24} is C_1 - C_{12} alkyl, halogen-substituted C_1 - C_{12} alkyl, phenyl, or phenyl substituted by OR_{11} and/or SR_{11} ;

with the proviso that R_6 and Z_1 are not identical,

as photoinitiator.